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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/550,708

09/26/2005

Toshiya Kobayashi

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BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER

CLARK, GREGORY D

ART UNIT

PAPER NUMBER

1794

NOTIFICATION DATE

DELIVERY MODE

02/12/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/550,708	<b>Applicant(s)</b> KOBAYASHI ET AL.	
	<b>Examiner</b> GREGORY CLARK	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 10 and 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09/26/2005</u> .  | 6) <input type="checkbox"/> Other: ____.                          |

**DETAILED ACTION**

***Election/Restrictions***

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-9, drawn to recording material.

Group II, claim(s) 10-11, drawn to method to produce article.

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The special technical feature does not provide a contribution over the prior art because the special technical feature is disclosed in Landry-Coltrain (6,753,051). Landry-Coltrain discloses a material for ink jet recording containing a (support) base material (abstract), and intermediate layer which include poly(vinyl-chloride) copolymer (column 16, lines 37-41), an ink receiving layer containing cellulose esters (column 12, line 38) which includes cellulose acetate (column 16, line 19), and plasticizers can be incorporated (Column 16, line 35).

During a telephone conversation with Marc Weiner on 1/17/2009 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-9. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-11 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product

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claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landry-Coltrain (6,753,051).**

**Regarding Claims 1-2, 4 and 8,** Landry-Coltrain discloses a material for ink jet recording containing a (support) base material (abstract), and intermediate layer which include poly(vinyl-chloride) copolymer (column 16, lines 37-41), an ink receiving layer containing cellulose esters (column 12, line 38) which includes cellulose acetate

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(column 16, line 19), and plasticizers can be incorporated (Column 16, line 35). The base material (support) can be (acrylic resin) polyacrylates (Column 16, line 25).

It is well known in the art that plasticizers are specifically added to reduce rigidity and promote flexibility. The term "plasticizer" from the concept that the addition of this material makes the material more "plastic". The term itself defines its function.

Landry-Coltrain teaches the claimed invention except for the disclosing the amount of plasticizers. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to have adjusted the amount of plasticizer for the intended application. This would relate to optimizing a rate effective variable, where in the amount of plasticizer would be directly related to the flexibility realized.

Landry-Coltrain discloses the components used by the applicant to apply the structural layers for making a material for ink jet recording. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the claimed combination of materials with a reasonable expectation of success since they are within the scheme of suggested materials.

**Regarding Claim 5**, Landry-Coltrain discloses a base material with a thickness of 50 to 500 microns. The applicant claims a thickness 5 to 70 microns. Landry-Coltrain discloses the claimed invention except for the exact thickness range.

These ranges overlap, and it would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range.

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Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to adjust the thickness of the base material depending on the desired end use of the material, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

**Regarding Claims 3 and 6**, Landry-Coltrain discloses that plasticizers can be used (column 16, line 35). Landry-Coltrain does not specifically mention a phthalate-based plasticizer.

Phthalate-based plasticizers are known in the art and one having ordinary skill in the art at the time the invention was made would readily select from such known materials for the intended application.

**Regarding Claim 7**, Landry-Coltrain discloses that the base material can be transparent (column 15, line 66), to improve adhesion between the support and the ink receiving layer an adhesive layer can be applied (column 16, lines 37-39), lubricating agent (release layer) are useful and can be applied on the side of the support (base material opposite the ink receiving layer (column 13, lines 44-47) and a laminated (support) base material is disclosed (column 23, line 58).

**Regarding Claim 9**, Landry-Coltrain discloses that the ink receiving or recording layer can be overcoated with an ink-permeable, anti-tack protective layer (column 20, lines 43-44).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landry-Coltrain (6,753,051) as applied to claim 1 above, and further in view of Ohta (6,071, 611).**

**Regarding Claims 3 and 6**, Landry-Coltrain discloses that plasticizers can be used in ink jet recording material. Landry-Coltrain fails to specifically disclose a phthalate-based plasticizer. Ohta discloses the following examples of phthalate-based plasticizers are used as components for ink jet recording materials: diphenyl phthalate, dicyclohexyl phthalate, dihexyl phthalate, dihydroabietyl phthalate, and dimethyl isophthalate (column 3, lines 4-6).



Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to readily select from the list of known phthalate based plasticizers for the intended application.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GREGORY CLARK whose telephone number is (571)270-7087. The examiner can normally be reached on M-Th 7:00 AM to 5 PM Alternating Fri 7:30 AM to 4 PM and Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on (571) 272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. Lawrence Tarazano/  
Supervisory Patent Examiner, Art Unit 1794

GDC

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